PATENT

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March 25, 2008   *Beggs*
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Date   Alexandra L. Beggs

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.   : 09/932,241   Confirmation No.   : 4822

Applicant   : Doug Rollins

Filed   : August 17, 2001   Attorney Docket No.: 500964.01 (29949/US)

Art Unit   : 2144   Customer No.   : 27,076

Examiner   : Peling Andy Shaw

Title   : NETWORK COMPUTER PROVIDING MASS STORAGE, BROADBAND ACCESS, AND OTHER ENHANCED FUNCTIONALITY

Mail Stop Appeal Brief –Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPELLANT'S BRIEF (37 C.F.R. § 41.37)

Sir:

This brief is in furtherance of the Notice of Appeal, filed in this case on October 16, 2007. The fees required under Section 41.20, and any required request for extension of time for filing this brief and fees therefor, are dealt with in the accompanying transmittal letter.

TABLE OF CONTENTS

I.   REAL PARTY IN INTEREST.

The real party in interest in this appeal is the assignee of this application, Micron Technology, Inc., a Corporation of Delaware having a principal place of business in Boise, Idaho.

II.   RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences known to appellant, the assignee, or the assignee's legal representatives, which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

III.   STATUS OF CLAIMS

      A.   TOTAL NUMBER OF CLAIMS IN APPLICATION

      Claims in the application are: 1-6, 8-10, 16-20, 22-33, and 44-46.

      B.   STATUS OF ALL THE CLAIMS

          1.   Claims canceled: 7, 11-15, 21 and 34-43.

          2.   Claims withdrawn from consideration but not canceled: None.

          3.   Claims objected to: None.

          4.   Claims allowed or confirmed: None.

          5.   Claims rejected: 1-6, 8-10, 16-20, 22-33 and 37-46

      C.   CLAIMS ON APPEAL

      The claims on appeal are: 1-6, 8-10, 16-20, 22-33 and 44-46

IV.   STATUS OF AMENDMENTS

An amendment under 37 C.F.R. 41.33(b) filed concurrently with the present appeal brief has been submitted to cancel claims 37-43. The cancellation of these claims does not affect the scope of any of the pending claims in the proceeding.

V.   SUMMARY OF CLAIMED SUBJECT MATTER

The subject matter of claims 1, 16, and 25 are directed to a network computer system. The subject matter of claim 44 is directed to a method of operating a network computer system including a processor and a memory device coupled to the processor.

Claim 1

Claim 1 is directed to a network computer system that includes a processor and a memory device coupled to the processor. The memory device contains an embedded operating system that is executed by the processor. In one embodiment, a processor 304 executes programs stored in a FLASH memory 306 under control of an embedded operating system 308, which is also stored in the FLASH memory. See Figure 3 and page 7, lines 1-3.

Claim 1 further recites a network communication circuit coupled to the processor. The network communication circuit is adapted to allow the processor to communicate over a computer network with computer resources coupled to the network. In one embodiment, an Ethernet logic circuit 318 provides the processor 304 with a high speed communications channel over which the processor communicates with a broadband bridge device 320, which is coupled to the Ethernet logic circuit through a conventional RJ-45 jack 322. See page 7, lines 13-16. The broadband bridge device 320 is typically a cable modem or digital subscriber line (DSL) modem that transfers data to and from the processor 304 through the Ethernet logic circuit 318 and transfers data to and from the Internet 302 via a broadband communications link 324. See id., lines 16-19.

Claim 1 further recites a mass storage device coupled to the processor. The mass storage device has a first partition for storing user preference data and a second partition for storing user file data that may be accessed by the processor. In one embodiment, the network computer 300 also includes a mass storage device 334 which the processor 304 accesses through an intelligent drive electronics (IDE) controller logic circuit 336. See page 8, lines 3-5. The mass storage device 334 is subdivided into a user preferences segment 338 that stores user preference data 340 and a user data segment 342 that stores user file data 344. See id., lines 5-7. The mass storage device 334 may be a hard disk, CD-RW drive, or other suitable mass storage device, as will be

appreciated by those skilled in the art. When the mass storage device 334 is a hard disk, the hard disk is partitioned into the user preferences segment 338 and user data segment 342. See id., lines 10-13.

The network computer system of claim 1 further includes a user preferences reset device and a user file data reset device coupled to the mass storage device. The user preferences reset device is operable to reset at least some of the user preferences data independently of resetting user file data when activated and the user file data reset device operable to reset at least some of the user file data independently of resetting user preference data when activated. In one embodiment, each of the user preferences segment 338 and user data segment 342 may be independently reset by a preferences reset device 346 and a data reset device 348, respectively, to reset the user preferences data 340 and user file data 344 stored in the segments. See page 8, lines 7-10.

Claim 16

Claim 16 is directed to a network computer system that includes a processor and a memory device coupled to the processor. The memory device contains an embedded operating system that is executed by the processor. In one embodiment, a network computer 300 includes a processor 304 that executes programs stored in a FLASH memory 306 under control of an embedded operating system 308, which is also stored in the FLASH memory. See Figure 3 and page 7, lines 1-3.

The network computer system of claim 16 further includes a broadband network communication circuit coupled to the processor. The broadband network communication circuit is adapted to provide the processor with broadband access to a computer network to thereby access computer resources coupled to the computer network. In one embodiment, an Ethernet logic circuit 318 provides the processor 304 with a high speed communications channel over which the processor communicates with a broadband bridge device 320, which is coupled to the Ethernet logic circuit through a conventional RJ-45 jack 322. See page 7, lines 13-16. The broadband bridge device 320 is typically a cable modem or digital subscriber line (DSL) modem that transfers data to and from the processor 304 through the Ethernet logic circuit 318 and

transfers data to and from the Internet 302 via a broadband communications link 324. See id., lines 16-19.

Claim 16 further recites a mass storage device coupled to the processor. The mass storage device has a first partition for storing user preference data and a second partition for storing user file data that may be accessed by the processor. The mass storage device further has a user preferences reset device and a user file data reset device. The user preferences reset device is operable to reset at least some of the user preferences data without reset of the user file data when activated and the user file data reset device is operable to reset at least some of the user file data without reset of the user preferences data when activated. In one embodiment, the network computer 300 also includes a mass storage device 334 which the processor 304 accesses through an intelligent drive electronics (IDE) controller logic circuit 336. See page 8, lines 3-5. The mass storage device 334 is subdivided into a user preferences segment 338 that stores user preference data 340 and a user data segment 342 that stores user file data 344. See id., lines 5-7. Each of the user preferences segment 338 and user data segment 342 may be independently reset by a preferences reset device 346 and a data reset device 348, respectively, to reset the user preferences data 340 and user file data 344 stored in the segments. See id., lines 7-10.

Claim 25

The network computer system of claim 25 includes a processor and a memory device coupled to the processor. The memory device contains an embedded operating system that is executed by the processor, the embedded operating system including at least one system parameter. In one embodiment, a processor 304 executes programs stored in a FLASH memory 306 under control of an embedded operating system 308, which is also stored in the FLASH memory. See Figure 3 and page 7, lines 1-3.

The network computer system of claim 25 further includes a first reset device coupled to the memory device. The first reset device is operable, when activated, to set at least one of the system parameters of the embedded operating system to a desired value. In one embodiment, a reset device 310, such as a push-button switch, resets configurable parameters of the embedded operating system 308 in the event the network computer 300 "locks up" during operation, which

may occur, for example, if the user misconfigures the embedded operating system. See page 7, lines 6-9.

The network computer system of claim 25 further includes a network communication circuit coupled to the processor. The network communication circuit is adapted to allow the processor to communicate over a computer network with computer resources coupled to the network. In one embodiment, an Ethernet logic circuit 318 provides the processor 304 with a high speed communications channel over which the processor communicates with a broadband bridge device 320, which is coupled to the Ethernet logic circuit through a conventional RJ-45 jack 322. See page 7, lines 13-16. The broadband bridge device 320 is typically a cable modem or digital subscriber line (DSL) modem that transfers data to and from the processor 304 through the Ethernet logic circuit 318 and transfers data to and from the Internet 302 via a broadband communications link 324. See id., lines 16-19.

The network computer system of claim 25 further includes a mass storage device coupled to the processor. The mass storage device includes a user preferences partition and a user file data partition that contain user preference data and user file data, respectively, that may be accessed by the processor. In one embodiment, the network computer 300 also includes a mass storage device 334 which the processor 304 accesses through an intelligent drive electronics (IDE) controller logic circuit 336. See page 8, lines 3-5. The mass storage device 334 is subdivided into a user preferences segment 338 that stores user preference data 340 and a user data segment 342 that stores user file data 344. See id., lines 5-7.

The network computer system of claim 25 further include second and third reset devices coupled to the mass storage device. The second reset device is operable, when activated, to set at least some of the user preference data to desired values independently of setting any of the system parameters set by the first reset device. The third reset device is operable, when activated, to set at least some of the user file data to desired values independently of setting any of the system parameters set by the first reset device. In one embodiment, each of the user preferences segment 338 and user data segment 342 may be independently reset by a preferences reset device 346 and a data reset device 348, respectively, to reset the user preferences data 340 and user file data 344 stored in the segments. See page 8, lines 7-10. The embedded operating

system reset device 310, user preferences reset device 346, and data reset device 348 allow a user to independently reset corresponding components of the network computer 300. See page 9, lines 3-6.

Claim 44

Claim 44 is directed to a method of operating a network computer system including a processor and a memory device coupled to the processor. The memory device contains an embedded operating system that is executed by the processor, and the embedded operating system including at least one system parameter. In one embodiment, a processor 304 executes programs stored in a FLASH memory 306 under control of an embedded operating system 308, which is also stored in the FLASH memory. See Figure 3 and page 7, lines 1-3.

The method includes providing the processor with broadband access via a computer network to computer resources coupled to the network. In one embodiment, an Ethernet logic circuit 318 provides the processor 304 with a high speed communications channel over which the processor communicates with a broadband bridge device 320, which is coupled to the Ethernet logic circuit through a conventional RJ-45 jack 322. See page 7, lines 13-16. The broadband bridge device 320 transfers data to and from the processor 304 through the Ethernet logic circuit 318 and transfers data to and from the Internet 302 via a broadband communications link 324. See id., lines 16-19.

The method further includes providing mass storage for user preference data and user file data in a user preferences location and a user file data location, respectively. The data is accessible by the processor. In one embodiment, the network computer 300 includes a mass storage device 334 which the processor 304 accesses through an intelligent drive electronics (IDE) controller logic circuit 336. See page 8, lines 3-5. The mass storage device 334 is subdivided into a user preferences segment 338 that stores user preference data 340 and a user data segment 342 that stores user file data 344. See id., lines 5-7. The mass storage device 334 may be a hard disk, CD-RW drive, or other suitable mass storage device, as will be appreciated by those skilled in the art. When the mass storage device 334 is a hard disk, the hard disk is

partitioned into the user preferences segment 338 and user data segment 342. See id., lines 10-13.

The method further includes independently resetting system parameters associated with the embedded operating system, user preference data, and user file data in response to first, second, and third reset requests, respectively. In one embodiment, In one embodiment, a reset device 310, such as a push-button switch, resets configurable parameters of the embedded operating system 308 in the event the network computer 300 "locks up" during operation, which may occur, for example, if the user misconfigures the embedded operating system. See page 7, lines 6-9. Each of the user preferences segment 338 and user data segment 342 may be independently reset by a preferences reset device 346 and a data reset device 348, respectively, to reset the user preferences data 340 and user file data 344 stored in the segments. See page 8, lines 7-10. The embedded operating system reset device 310, user preferences reset device 346, and data reset device 348 allow a user to independently reset corresponding components of the network computer 300. See page 9, lines 3-6.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The grounds of rejection to be reviewed on appeal include whether claims 1, 16, 25, and 44, as well as any claims dependent therefrom, are obvious over U.S. Patent No. 6,301,666 to Rive (the "Rive patent"), in view of U.S. Patent Application Publication No. 2002/0188887 to Largman et al. (the "Largman application"). Additionally, the grounds of rejection to be reviewed on appeal include whether claims 3, 17, 27, and 33 are obvious over the Rive patent, in view of the Largman application and U.S. Patent Application Publication No. 2003/0033606 to Puente et al. (the "Puente application").

VII. ARGUMENTS

A. *The Subject Matter of Claims 1, 16, 25, and 44*

Claim 1 reads as follows:

1.   A network computer system, comprising:

a processor;

a memory device coupled to the processor, the memory device containing an embedded operating system that is executed by the processor;

a network communication circuit coupled to the processor; the network communication circuit being adapted to allow the processor to communicate over a computer network with computer resources coupled to the network;

a mass storage device coupled to the processor, the mass storage device having a first partition for storing user preference data and a second partition for storing user file data that may be accessed by the processor; and

a user preferences reset device and a user file data reset device coupled to the mass storage device, the user preferences reset device operable to reset at least some of the user preferences data independently of resetting user file data when activated and the user file data reset device operable to reset at least some of the user file data independently of resetting user preference data when activated.

Claim 1 requires the network computer system to include a mass storage device having a first partition for storing user preference data and having a second partition for storing user file data. Claim 1 further requires the network computer system include a user preferences reset device and a user file data reset device. The user preferences reset device is able to reset at least some of the user preferences data independently of resetting user file data when activated and the user file data reset device is able to reset at least some of the user file data independently of resetting user preference data when activated.

Claim 16 reads as follows:

16. A network computer system, comprising:

a processor;

a memory device coupled to the processor, the memory device containing an embedded operating system that is executed by the processor;

a broadband network communication circuit coupled to the processor; the broadband network communication circuit being adapted provide the processor with broadband access to a computer network to thereby access computer resources coupled to the computer network; and

a mass storage device coupled to the processor, the mass storage device having a first partition for storing user preference data and a second partition for storing user file data that may be accessed by the processor, the mass storage device having a user preferences reset device and a user file data reset device, the user preferences reset device operable to reset at least some of the user preferences data without reset of the user file data when activated and the user file data reset device operable to reset at least some of the user file data without reset of the user preferences data when activated.

Claim 16 requires the network computer system to include a mass storage device having a first partition for storing user preference data and having a second partition for storing user file data. The mass storage device has a user preferences reset device and a user file data reset device. The user preferences reset device is able to reset at least some of the user preferences data without rest of the user file data when activated and the user file data reset device is able to reset at least some of the user file data without reset of the user preference data when activated.

Claim 25 reads as follows:

25. A network computer system, comprising:

a processor;

a memory device coupled to the processor, the memory device containing an embedded operating system that is executed by the processor, the embedded operating system including at least one system parameter;

a first reset device coupled to the memory device, the first reset device operable, when activated, to set at least one of the system parameters of the embedded operating system to a desired value;

a network communication circuit coupled to the processor; the network communication circuit being adapted to allow the processor to communicate over a computer network with computer resources coupled to the network; and

a mass storage device coupled to the processor, the mass storage device including a user preferences partition and a user file data partition that contain user preference data and user file data, respectively, that may be accessed by the processor;

a second reset device coupled to the mass storage device, the second reset device operable, when activated, to set at least some of the user preference data to desired values independently of setting any of the system parameters set by the first reset device; and

a third reset device coupled to the mass storage device, the third reset device operable, when activated, to set at least some of the user file data to desired values independently of setting any of the system parameters set by the first reset device.

Claim 25 requires the network computer system to include a memory device containing an embedded operating system and further include a mass storage device having a user preferences partition that contains user preference data and having a user file data partition that contains user file data. The network computer system further includes first, second and third reset devices. The first reset device is coupled to the memory device, and when activated, sets at least one of the system parameters of the embedded operating system to a desired value. The second reset device is coupled to the mass storage device, and when activated, sets at least some of the user preference data to desired values independently of setting any of the system parameters set by the first reset device. The third reset device is also coupled to the mass storage

device and sets at least some of the user file data to desired values independently of setting any of the system parameters set by the first reset device.

Claim 44 reads as follows:

44. A method of operating a network computer system including a processor and a memory device coupled to the processor, the memory device containing an embedded operating system that is executed by the processor, and the embedded operating system including at least one system parameter, the method comprising:

providing the processor with broadband access via a computer network to computer resources coupled to the network;

providing mass storage for user preference data and user file data in a user preferences location and a user file data location, respectively, the data being accessible by the processor; and

independently resetting system parameters associated with the embedded operating system, user preference data, and user file data in response to first, second, and third reset requests, respectively.

Claim 44 requires the network computer to have a memory device containing an embedded operating system. Claim 44 further requires providing mass storage for user preference data in a user preferences location and for user file data in a user file data location, and independently resetting system parameters associated with the embedded operating system, user preference data, and user file data in response to first, second, and third reset requests, respectively.

B. The Subject Matter Disclosed in the Rive patent

The Rive patent describes a computer system having a storage device 52 (typically a hard drive) that is formatted to have at least four partitions. The partitions are identified as a supported partition 54, an unsupported partition 56, a mirror partition 58, and an output partition 60. See col. 5, lines 45-65. The supported partition includes boot sector 28,

operating system 62, and application software 64. The supported partition is protected from user modification. See col. 5, line 65-col. 6, line 8. A copy of the content of the supported partition 54 is located in the mirror partition 58. In this way, changes to the content of the supported partition 54 can be identified by comparing it with the content of the mirror partition 58, and if necessary, the content of the supported partition 54 can be restored by copying the content of the mirror partition 58 when desired. For example, the content of the supported partition 54 can be restored when a virus or execution error modifies the content of the supported partition 54. See col. 6, line 33-col. 7, line 2.

The unsupported partition 56 includes an operating system 66 and application programs 68, and is unprotected so that its content can be modified by a user, such as by installing applications. See col. 7, lines 26-46. The output partition 60 is unrestricted and stores information generated by the supported partition 54, such as output documents from application 64, and configuration data required by the operating system 62 and application 64 of the supported partition 54, such as access configuration and setting files that record user preferences and settings. Browser bookmarks, as well as configuration and settings of word processing and spreadsheet applications are examples of the data stored together in the output partition 60. See col. 7, line 47-col. 8, line 17. The output partition 60 can further store output documents and configuration data for the operating system 66 and application programs 68 from the unsupported partition 56.

As described in the Rive patent, partitioning the hard drive 52 in this manner allows the content of the supported partition 54 to be protected, and to be easily restored when desired. Also, storing all of the user configuration and setting data, as well as the user data generated by the operating systems and applications separately from both the supported and unsupported partitions 54, 56 allow for separating operating systems and applications from user content to allow for easy restoration of the operating systems and applications and backup of the user content. See col. 13, lines 34-41.

C.   The Subject Matter Disclosed in the Largman application

The Largman application describes a computer repair process that uses switches to electrically switch components that have failed to components that function properly. See paragraphs 2-16. For example, data storage devices, such as hard drives, can be switched from one that has failed or has been corrupted to one that is fully functioning. See paragraphs 6-13. The switching capability is further extended to other components of a computer as well, such as power supplies, jumper connections, network connections and other circuits. See paragraphs 21 and 22. In a particular example described in the Largman application, two hard drives are used to restore a corrupt operating system, applications, and user data. A first hard drive is typically used during operation of a computer, and a second hard drive includes a duplicate of the operating system, applications, and backup versions of the user data. Upon corruption of the operating system, applications, or user data of the first hard drive, the first hard drive is reformatted and the data stored in the second hard drive is copied to the first hard drive to restore the operating system, applications, and a backup of the user data. The switching circuitry described in the Largman application enable this type of operation by allowing switching between the first and second hard drives.

D.   Summary of the Rejection

In the Office Action mailed April 16, 2007 (the "Final Office Action"), the Examiner issued a final rejection of independent claims 1, 16, 25, 37, and 44 (and dependent claims 2, 4-6, 8-10, 18-20, 22-24, 26, 28-32, 39-43, 45, and 46) as being unpatentable over the Rive patent in view of the Largman application. The Examiner argues the Rive patent teaches, among other things, a mass storage device that is partitioned for storing user preferences data in a first partition and user file data in a second partition. See the Final Office Action at page 3. The Rive patent, however, does not show a user preferences reset device and a user file data reset device coupled to the mass storage device, the user preferences reset device operable to reset at least some of the user preferences data independently of resetting user file data when activated and the user file data reset device operable to reset at least some of the user file data independently of resetting user preferences data when activated. See id.

The Examiner cites the Largman application as teaching a user preferences reset device and a user file data reset device coupled to the mass storage device, the user preferences reset device operable to reset at least some of the user preferences data independently of resetting user file data when activated and the user file data reset device operable to reset at least some of the user file data independently of resetting user preferences data when activated. See the Office Action at page 3. The Examiner cites paragraphs 2 and 21, and paragraphs 10 and 131 of the Largman application, in support of the argument. See id.

The Examiner argues it would have been obvious to a person of ordinary skill in the art to modify the functions of providing multiple configurations for different users taught in the Rive patent with the functions of being able to repair (reset) software system per different user setup, as taught in the Largman application. See the Office Action at page 4. The Examiner further argues one of ordinary skill in the art would have been motivated to be able to repair a multi-user system per the teachings of the Largman application to provide a system for multiple users as taught in the Rive patent and the Largman application. See id.

The Examiner rejected dependent claims 3, 17, 27, 33, and 38 as being unpatentable over the Rive patent, in view of the Largman application and the Puente application.

E. The Claimed Inventions Of Claims 1, 16, 25, 37, And 44 Are Not Obvious To One Of Ordinary Skill In The Art

The issue for consideration in this Appeal is whether the claimed inventions of claims 1, 16, 25, 37, and 44 are obvious to one of ordinary skill in the art after consideration of all the facts. See MPEP 2141(III). As will be discussed below, the combined teachings of the Rive patent and the Largman application fail to teach or suggest the combination of limitations recited by the claims. Although prior art references need not teach or suggest all the claim limitations, in such a case the Examiner must explain why the differences between the prior art, namely, the Rive patent and the Largman application, and the claimed invention would have been obvious to one or ordinary skill in the art. See id. The Examiner has not done so. Moreover, prior art must be considered in its entirety, including disclosures that teach away from the claims. See MPEP 2141.02(VI).

1.   The Rive patent does not teach a mass storage device having a first partition for storing user preference data and a second partition for storing user file data

As previously discussed, the Rive patent describes partitioning a hard drive so that there are (1) a supported partition, (2) an unsupported partition, (3) a mirror partition, and (4) an output partition. The output partition is for storing information related to configuration and settings data for the operating systems and applications of the supported and unsupported partitions, as well as for storing data generated by the operating systems and applications of those two partitions. The Rive patent, however, does not teach separating the configuration and settings data and the data generated by applications between two different partitions. On the contrary, the Rive patent teaches storing all user modifiable data in one partition. The user modifiable data is analogous to data that includes both user preference data and user file data. Moreover, the Rive patent goes further by describing the arrangement of using one partition (output partition 60) for storing both the configuration data and user data to be shared by the operating system and applications of two other partitions (supported and unsupported partitions 54, 56) as "advantageous in that it provides a single, unified location at which output data, configuration data, and other modifiable data can be saved." See col. 13, lines 34-40. Partitioning the hard drive 52 in a manner which the configuration and settings data is separated in a different partition from the user application data would be contrary to teachings of the Rive patent, since it would not provide the "single, unified location," which is described as being "advantageous."

The Examiner cites Figures 3, 4, 14; column 5, lines 26-43; column 6, lines 1-33; and column 7, lines 47-67 in support of the rejection. None of the cited material teaches the mass storage device as recited in claims 1, 16, 25, and 44.

The material at column 5, lines 26-43 describes the Windows 95 operating system registry 40 illustrated in Figure 3. In particular, the registry 40 is described as having the six branches shown in Figure 3. One of the branches, the HKEY_User branch 44, "contains certain preferences for each user of a computer system." See col. 5, lines 33-35. The cited material further describes use of a registry editor 46 to modify various values contained within the

registry 40. See id., lines 37-41. The Examiner argues the registry is analogous to user preference data. See the Office Action at page 3. The registry 40 is shown in Figure 4 as included in the same partition as the operating system software 62, in particular, the supported partition 54 and the unsupported partition 56. In other words, the "preferences for each user," (the "user preference data" according to the Examiner), is in the *same* partition as the operating system. In contrast, the claimed invention has the user preference data and the operating system in different storage media, that is, the user preference data is stored in a partition of a mass storage device and the operating system is contained in a memory device.

The material at column 6 cited by the Examiner generally describes Figure 4, and in particular, describes having the boot sector 28, system files 30, operating system software 62 and application software 64 in the supported partition 54. See col. 5, line 65-col. 6, line 2. The supported partition 54 is protected from user modification. See col. 6, lines 4-7. The cited material further describes techniques for preventing user modification of the content of the supported partition 54. One technique utilizes the registry 40, which as previously discussed, is also stored in the supported partition 54 along with the operating system software 62. See id., lines 10-19. Another technique is setting appropriate indicators within a policy file 41 for the supported partition 54. The policy file 41 is also stored in the supported partition 54 with the registry 40 and the operating system software 62. See id., lines 20-33. As with the material cited by the Examiner at column 5, the material at column 6 does not describe the mass storage device as recited in the claims. On the contrary, the material cited at column 6 supports an argument that the Rive patent expressly describes a mass storage system that is different than that recited in the pending claims, namely, the storage device 52 includes a supported partition 54 that stores both the operating system software 62 and the registry 40, which the Examiner has argued represents the user preferences data recited in the claims.

The material at column 7 cited by the Examiner describes an output partition 60 illustrated in Figure 4. The output partition 60 is described as not having user restricted access and stores information that can be changed by the user. See col. 7, lines 47-51. Examples of this type of information includes output documents 70 and configuration data 72. See id., lines 52-67. The output documents 70 can include user generated documents, such as word processor

documents. See id., lines 54-56. The configuration data 72 is described as including "user preferences and settings," for example, user-specific "bookmarks," as well as access settings and configurations files for word processor, spreadsheet and other application programs. See id., lines 59-67. In summary, the cited material describes having user preferences and settings stored in the same partition as user-generated documents. Not only does the cited material not describe a mass storage device as recited in the claims, the cited material expressly describes an arrangement that is clearly different than that recited in the claims. That is, the Rive patent describes having both user preference data and user filed data in the *same* partition.

Figure 14 is "a block diagram illustrating a machine, in the exemplary form of a computer system, within which a set of instructions for causing a computer system to perform any of the methodologies discussed in the [Rive patent] specification may be executed." See col. 3, lines 6-10. Neither Figure 14 nor the related description at col. 18, line 56-col. 19, line 18, describe a mass storage device as recited in the claims.

In sum, the material cited by the Examiner, taken in whole or in part, fails to teach mass storage devices as recited by the claims. The material expressly teaches having user preference data (i.e., represented by the registry 40, as argued by the Examiner) and the operating system in the same partition (i.e., supported partition 54) and having user preference data (i.e., "user preferences and settings") and user file data (i.e., "user-generated documents") in the same partition, both of which are contrary to the limitations of the claimed invention.

2. The Largman application does not teach a user preference reset device and a user file data reset device as recited in the claims

As previously discussed, the Largman application teaches a computer system utilizing switches to electrically switch out defective components and be replaced with fully functioning components. In the particular example previously discussed, which is described at paragraphs 26-45 of the Largman application, the switching that occurs is entirely at the component level, namely, switching between one hard drive and another. The Largman application does not describe switching between partitions within a hard drive. As illustrated by the Largman example, the content of the different hard drive partitions are not reset, but the content of an entire drive is restored. That is, the operating system and applications from

partition "b" of the fully functioning second hard drive are copied to the corrupted first hard drive. Along with "pristine" copies of the operating system and applications from the second hard drive, user data from a backup version stored in partition "c" are copied over to the first hard drive as well. "Resetting" as described in the Largman application consists of wiping out the data of the defective hard drive and copying all new data.

Moreover, the Largman application describes backing-up user data in partition "c" of the second hard drive. The Largman application does not suggest that "user data" includes two different types of data, namely, user preference data and user file data. The Largman application merely considers "user data" to all be the same, without any consideration of storing one type of user data in one partition and another type of user data in another partition. All of the user data is backed-up into the same partition, namely, partition "c."

The Examiner cites paragraphs 2 and 21, paragraphs 31-42, and paragraphs 10 and 131. None of the cited material, however, supports the Examiner's characterization of the Largman application.

The Examiner cites paragraphs 2 and 21 as teaching "switch[ing] on and off to rest [sic] hardware and software settings, including storage device" See the Office Action at page 3. Paragraph 2 describes the goals of the inventors to develop a computer that can "enable typical, non-technical, computer users to repair complex computer problems without effort, repair knowledge or skills." Paragraph 21 describes adding "switching features" to provide the ability to "switch between entire sets of data storage devices, . . . switch power supply, jumper cable connections, network connections, and any type of circuit or connection, and enabled the ability to reset hardware and software settings."

The cited material essentially teaches the use of "switching" to provide an easy-to-repair computer. For example, including the use of switching to reset hardware and software settings. Paragraphs 2 and 21, however, do not teach the user preferences reset device and the user file data reset device as recited in the claims. As described in the Largman application, and as previously discussed, the "switching" can be used to replace or restore an entire hard drive by switching out a corrupted hard drive and switching in a backup hard drive. Data stored in

different partitions of a hard drive, however, are not independently resettable, as recited in the claims.

Paragraph 10, repeated here in its entirety, describes "[a] way to enable a computer to have totally separate and independent and multiple operating systems and unique setups on one computer." Paragraph 131 is a heading for the "multi-user" system. Paragraph 132, however, describes a "multi-user" system that can enable "multiple users to use computer hardware as if each of the users had their own private computer." As described at paragraph 132, the multi-user system provides the data storage device, operating system, and applications for the particular user. When a different user wants to use the computer, the system hides the previous users data storage device, operating system, software, and data by using the switching process described elsewhere in the Largman application, and provides a different data storage device, operating system, and software for the new user.

In summary, paragraphs 10 and 132 teach a multi-user system having different setups (i.e., data storage device, operating system, applications, and data) for different users that can be switched into operation so that the computing hardware can be used by each user as if each of the users had their own private computer. The cited material, however, does not teach the user preferences reset device and the user file data reset device as recited in the claims. In particular, the cited material does not teach the user preferences reset device operable to reset at least some of the user preferences data independently of resetting user file data when activated, and the user file data reset device operable to reset at least some of the user file data independently of resetting user preference data when activated. The separate and independent setups described by the cited materials are related to different users, and are not related to resetting data stored in particular partitions of a data storage device, such as a hard drive. The claimed inventions, in contrast, are directed to separate and independent resetting of types of data stored in particular partitions of a mass storage device (also, for at least one claim, separate and independent of resetting the operating system stored in a memory).

3. The combination of the teachings from the Rive patent and the Largman application does not teach or suggest the combination of limitations recited by the claims

In contrast to the combined teachings of the Rive patent and Largman application, the pending claims generally recite storing user preference data and user file data in separate partitions of a mass storage device, and further recite a reset device that resets at least some of the user preferences data and resets at least some of the user file data independently of or without resetting the other data.

For example, claim 1 recites a network computer system including a mass storage having a first partition for storing user preference data and a second partition for storing user file data that may be accessed by the processor, and further including user preferences reset device and user file data reset device, each resetting the respective user data independently of resetting the other type of user data. As previously discussed, both the Rive patent and the Largman application describe storing user modifiable data (including both configuration and settings data, and user application data) or user data in the same partition of a hard drive. Moreover, the Largman application, which has been cited by the Examiner as teaching user preference data and user file data reset devices, teaches a system where all data is rewritten to the entire hard drive when hard drive corruption occurs, including operating system, application software, and user data.

Assuming for the sake of argument the teachings of the Rive patent and the Largman application would be combined by one of ordinary skill in the art, the combined teachings would result in a computer system that has a first hard drive partitioned as described in the Rive patent (which is consistent with partitioning described in the Largman application with respect to user data), and further including a second hard drive on which an exact duplicate of the operating system and applications, as well as back-up versions of user data, are stored. As part of restoring corrupted data of a first hard drive, the first hard drive is reformatted (i.e., erased) and all new operating system, applications, and user data are copied to the reformatted hard drive. The combined teachings of the Rive patent and the Largman application, however, do not teach or suggest the combination of limitations recited by claim 1.

Claim 16 recites a network computer that includes a mass storage device having a first partition for storing user preference data and a second partition for storing user file data that may be accessed by the processor. The mass storage device further includes a user preferences reset device and a user file data reset device, the user preferences reset device operable to reset at least some of the user preferences data without reset of the user file data when activated and the user file data reset device operable to reset at least some of the user file data without reset of the user preferences data when activated. Claim 25 recites network computer systems that include a mass storage device including a user preferences partition and a user file data partition that contain user preference data and user file data, respectively, that may be accessed by the processor. The network computer system further includes a second reset device operable, when activated, to set at least some of the user preference data to desired values independently of setting any of the system parameters set by the first reset device and a third reset device operable, when activated, to set at least some of the user file data to desired values independently of setting any of the system parameters set by the first reset device. Claim 44 recites a method of operating a network computer system including providing mass storage for user preference data and user file data in a user preferences location and a user file data location, respectively, the data being accessible by the processor, and independently resetting system parameters associated with the embedded operating system, user preference data, and user file data in response to first, second, and third reset requests, respectively.

As previously discussed with reference to claim 1, the combined teachings of the Rive patent and the Largman application do not teach or suggest the combination of limitations recited by claims 16, 25, and 44. The Rive patent teaches storing configuration and settings data in one partition. The Largman application teaches storing all user data in one partition, and also teaches restoring corrupted data of a hard drive by copying all new data, including operating system, applications, and user data, from a backup hard drive to the corrupted hard drive.

For the foregoing reasons, claims 1, 16, 25, and 44 are patentable over the Rive patent in view of the Largman application. Claims 2, 4-6, 8-10, 16, which depend from claim 1, claims 18-20 and 22-24, which depend from claim 16, claims 26, 28-32, which depend from claim 25, and claims 45 and 46, which depend from claim 44 are similarly patentable over the

Rive patent in view of the Largman application due to their dependency from a respective allowable base claim. Therefore, the rejection of claims 1, 2, 4-6, 8-10, 16, 18-20, 22-26, 28-32, and 44-46 under 35 U.S.C. 103(a) should be reversed.

4. The Puente application does not make up for the deficiencies of the Rive patent and the Largman application

As previously mentioned, claims 3, 17, 27, 33, and 38 were rejected under 35 U.S.C. 103(a) as being unpatentable over the Rive patent, in view of the Largman application and the Puente application. The Examiner has cited the Puente application as teaching a broadband communications device comprising a cable modem, and further teaching a router program that is executed by the processor. See the Office Action at page 6. Even if it is assumed for the sake of argument that the Examiner's characterizations of the Puente application are accurate, it fails to make up for the deficiencies of the Rive patent and Largman application as previously discussed.

For the foregoing reasons, claims 3, 17, 27, and 33 are patentable over the Rive patent, in view of the Largman application and the Puente application, and therefore, the rejection of claims 3, 17, 27, and 33 under 35 U.S.C. 103(a) should be reversed.

5. The Examiner does not provide any other rationale to support a conclusion of obviousness

As previously discussed, the claimed invention would not have been obvious to one of ordinary skill based on the teachings of the Rive patent, the Largman application and the Puente application. The Examiner, however, has not clearly articulated any other rationale why the invention of claims 1, 16, 25, and 44 would have been obvious over the Rive patent in view of the Largman application, for example:

(A) Combining prior art elements according to known methods to yield predictable results;

(B) Simple substitution of one known element for another to obtain predictable results;

(C) Use of known technique to improve similar devices (methods, or products) in the same way;

(D) Applying a known technique to a known device (method, or product) ready for improvement to yield predictable results;

(E) "Obvious to try" - choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success;

(F) Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations are predictable to one of ordinary skill in the art;

(G) Some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention.

See MPEP 2143. Although the previous list of rationales is not intended to be an all-inclusive list, the Examiner has not provided any other rationales to support a conclusion of obviousness.

VIII. CLAIMS APPENDIX

The text of the claims involved in the appeal are:

1.   A network computer system, comprising:

a processor;

a memory device coupled to the processor, the memory device containing an embedded operating system that is executed by the processor;

a network communication circuit coupled to the processor; the network communication circuit being adapted to allow the processor to communicate over a computer network with computer resources coupled to the network;

a mass storage device coupled to the processor, the mass storage device having a first partition for storing user preference data and a second partition for storing user file data that may be accessed by the processor; and

a user preferences reset device and a user file data reset device coupled to the mass storage device, the user preferences reset device operable to reset at least some of the user preferences data independently of resetting user file data when activated and the user file data reset device operable to reset at least some of the user file data independently of resetting user preference data when activated.

2.   The network computer of claim 1 wherein the network communication circuit comprises a broadband communications device.

3.   The network computer of claim 2 wherein the broadband communications device comprises a cable modem.

4.   The network computer of claim 2 wherein the broadband communications device comprises a DSL modem.

5.   The network computer of claim 1 wherein the mass storage device comprises a hard disk.

6.   The network computer of claim 5 wherein the hard disk comprises a user preferences partition and a user file data partition that store associated user preference data and user file data, respectively, with the data in each partition being capable of being set to desired values independently of the data in the other partition.

8.   The network computer of claim 1 wherein the embedded operating system includes system parameters having associated default values, at least some the default values being adjustable, and the memory device comprises a reset device for resetting the system parameters to the default values.

9.   The network computer of claim 1 wherein the memory device comprises a FLASH memory device.

10.   The network computer of claim 1 wherein the processor comprises a microprocessor and associated support components, and includes a user input and a user output device.

16.   A network computer system, comprising:
a processor;
a memory device coupled to the processor, the memory device containing an embedded operating system that is executed by the processor;
a broadband network communication circuit coupled to the processor; the broadband network communication circuit being adapted provide the processor with broadband access to a computer network to thereby access computer resources coupled to the computer network; and

a mass storage device coupled to the processor, the mass storage device having a first partition for storing user preference data and a second partition for storing user file data that may be accessed by the processor, the mass storage device having a user preferences reset device and a user file data reset device, the user preferences reset device operable to reset at least some of the user preferences data without reset of the user file data when activated and the user file data reset device operable to reset at least some of the user file data without reset of the user preferences data when activated.

17. The network computer of claim 16 wherein the broadband network communications circuit comprises a cable modem.

18. The network computer of claim 16 wherein the broadband network communications circuit comprises a DSL modem.

19. The network computer of claim 16 wherein the mass storage device comprises a hard disk.

20. The network computer of claim 19 wherein the hard disk comprises a user preferences partition and a user file data partition that store associated user preference data and user file data, respectively, with the data in each partition being capable of being set to desired values independently of the data in the other partition.

22. The network computer of claim 16 wherein the embedded operating system includes system parameters having associated default values, at least some the default values being adjustable, and the memory device comprises a reset device for resetting the system parameters to the default values.

23. The network computer of claim 16 wherein the memory device comprises a FLASH memory device.

24. The network computer of claim 16 wherein the processor comprises a microprocessor and associated support components, and includes a user input device and a user output device.

25. A network computer system, comprising:

a processor;

a memory device coupled to the processor, the memory device containing an embedded operating system that is executed by the processor, the embedded operating system including at least one system parameter;

a first reset device coupled to the memory device, the first reset device operable, when activated, to set at least one of the system parameters of the embedded operating system to a desired value;

a network communication circuit coupled to the processor; the network communication circuit being adapted to allow the processor to communicate over a computer network with computer resources coupled to the network; and

a mass storage device coupled to the processor, the mass storage device including a user preferences partition and a user file data partition that contain user preference data and user file data, respectively, that may be accessed by the processor;

a second reset device coupled to the mass storage device, the second reset device operable, when activated, to set at least some of the user preference data to desired values independently of setting any of the system parameters set by the first reset device; and

a third reset device coupled to the mass storage device, the third reset device operable, when activated, to set at least some of the user file data to desired values independently of setting any of the system parameters set by the first reset device.

26. The network computer of claim 25 wherein the network communication circuit comprises a broadband communications device.

27. The network computer of claim 25 wherein the network communication circuit comprises a cable modem.

28. The network computer of claim 27 wherein the network communication circuit comprises a DSL modem.

29. The network computer of claim 25 wherein the mass storage device comprises a hard disk.

30. The network computer of claim 25 wherein each of the first, second, and third reset devices comprises a switch having an actuator that is adapted to be activated in response to a physical action of a user.

31. The network computer of claim 25 wherein the memory device comprises a FLASH memory device.

32. The network computer of claim 25 wherein the processor comprises a microprocessor and associated support components, and includes a user input and a user output device.

33. The network computer of claim 25 wherein the memory device contains a router program that is executed by the processor to operate the network computer in a Web-caching mode of operation, and the network communication circuit is adapted to allow the processor to communicate over a second computer network, the processor executing the router program to cache files on the mass storage device and provide users coupled to the second computer network with selected cached files responsive to user requests for the selected files.

44. A method of operating a network computer system including a processor and a memory device coupled to the processor, the memory device containing an embedded

operating system that is executed by the processor, and the embedded operating system including at least one system parameter, the method comprising:

providing the processor with broadband access via a computer network to computer resources coupled to the network;

providing mass storage for user preference data and user file data in a user preferences location and a user file data location, respectively, the data being accessible by the processor; and

independently resetting system parameters associated with the embedded operating system, user preference data, and user file data in response to first, second, and third reset requests, respectively.

45. The method of claim 44 wherein the first, second, and third reset requests comprise respective physical actions of a user.

46. The method of claim 44 wherein providing mass storage for user preference data and user file data in a user preferences location and a user file data location, respectively, comprises providing for storage on a hard disk and the user preferences location and user file data location correspond to a user preferences partition and a user filed data partition, respectively, on the disk.

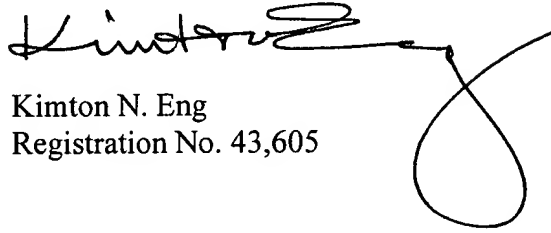IX.   EVIDENCE APPENDIX

None.

X.   RELATED PROCEEDINGS APPENDIX

None.

XI. CONCLUSION

For all of the reasons stated above, the rejection of claims 1-6, 8-10, 16-20, 22-33, and 44-46 should be reversed.

Respectfully submitted,

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